

February 19, 2021

#### **VIA COMMISSION PORTAL**

Christopher J. Kirkpatrick Secretary, Commodity Futures Trading Commission Three Lafayette Centre 1155 21st Street, N.W. Washington, D.C. 20581

Re: Commission Regulation 40.2(a) – Certification of Prepaid USDETH Deci Options LedgerX LLC Submission No. 21-05

Dear Mr. Kirkpatrick:

LedgerX LLC ("<u>LedgerX</u>") hereby notifies the Commodity Futures Trading Commission (the "Commission"), pursuant to Commission Regulation 40.2(a), that it is certifying the Prepaid USDETH Deci Options (the "Company Contract") for trading on LedgerX's designated contract market ("DCM").

LedgerX will list the Company Contract no earlier than March 6, 2021.<sup>1</sup>

This certification includes the following:

- The submission cover sheet, which shall be generated through the Commission's submission portal at the time of filing.
- A concise explanation and analysis of the Company Contract, attached as <u>Exhibit A</u>.
- A copy of the Company Contract's rules, which will be published as contract specifications on LedgerX's website, attached as <a href="Exhibit B">Exhibit B</a>.
- A concise explanation and analysis of the Company Contract's compliance with applicable provisions of the Commodity Exchange Act (the "CEA"), including the Core Principles, and the Commission's Regulations thereunder, attached as <a href="Exhibit C">Exhibit C</a>.
- A deliverable supply analysis, attached as <u>Exhibit D</u>.

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<sup>&</sup>lt;sup>1</sup> Concurrently with this filing, LedgerX has also filed certain amendments to the LedgerX Rules, which will become effective on March 6, 2021, pending all relevant CFTC regulatory review periods (the "March 2021 Rule Amendments"). Therefore, notwithstanding the earlier self-certification of this contract pursuant to CFTC Regulation 40.2(a), LedgerX expects to list the Company Contract for trading beginning on March 6, 2021.



LedgerX certifies that the Company Contract complies with the CEA and Commission Regulations thereunder. LedgerX additionally certifies that it has concurrently posted a copy of this submission letter and the attachments hereto on LedgerX's website at <a href="https://ledgerx.com/">https://ledgerx.com/</a>.

\* \* \* \*

Please contact the undersigned at gc@ledgerx.com if you have any questions or you would otherwise like to discuss this further.

Sincerely,

Brian G. Mulherin

General Counsel, LedgerX LLC

Brian A. Mulherin



#### Exhibit A

Below is a concise explanation of the Company Contract:

The Company Contract is a USD-priced option on  $1/10^{th}$  of an Ether (ETH), which is fully collateralized. Prior to order execution, LedgerX ensures that each party to the Company Contract is capable of fully performing its obligations under the Company Contract, whether it be to deliver USD or ETH, as described below.

#### A. Placing Order for Company Contract

Prior to accepting an order for the purchase or sale of a Company Contract, LedgerX shall review the Participant's Collateral Account to ensure the Participant can fully collateralize the Participant's obligations under the Company Contract. *See* Rules 6.1.A and 7.1. A prospective buyer must post to LedgerX the aggregate amount that will be debited from buyer's Participant Account on the Initial Payment Date (the "Premium"). A prospective seller must post to LedgerX the following: (1) for a call option, the total amount of ETH that will be debited from seller's Participant Account at Settlement; or (2) for a put option, the total amount of USD that will be debited from the seller's Participant Account at Settlement.

## B. Execution of Order for Company Contract

At the time an order for a Company Contract is executed (the "Initial Payment Date"), LedgerX shall debit from the buyer's Participant Account, and credit to the seller's Participant Account, the Premium for the Company Contract. Additionally, LedgerX shall hold the seller's collateral unencumbered pending Settlement or expiration of the Company Contract to ensure performance. *See* Rule 7.2.

## C. <u>Settlement or Expiration of Company Contract</u>

To exercise the call or put option under the Company Contract, the buyer must tender exercise instructions to the Exchange's Designated Contract Market prior to expiration, and have sufficient collateral available for trading in buyer's account at that time to satisfy buyer's Settlement obligations described below. *See* Rules 7.1 and 7.2. Once a valid exercise instruction is received from a buyer, LedgerX shall hold buyer's collateral unencumbered pending Settlement. *See* Rule 7.2. The Company Contract will not be exercised automatically. *See* Rule 6.2.E.<sup>2</sup>

LedgerX shall settle call options by recording the following transfers in the Participant Accounts of the buyer or seller as follows: (1) the call option buyer shall be debited the total U.S. dollar strike price, and shall be credited with the total ETH due under the Company Contract; (2) the call

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<sup>&</sup>lt;sup>2</sup> See March 2021 Rule Amendments, amended Rule 6.2.E.

# **□**LedgerX

option seller shall be debited to total ETH due under the Company Contract, and shall be credited with the total U.S. dollar strike price. See Rule 6.2.C.<sup>3</sup>

LedgerX shall settle put options by recording the following transfers in the Participant Accounts of the buyer or seller as follows: (1) the put option buyer shall be debited the total ETH set forth in the Company Contract, and shall be credited with the total U.S. dollar strike price; (2) the put option seller shall be debited the total U.S. dollar strike price due under the Company Contract, and shall be credited with the total ETH set forth in the Company Contract. See Rule 6.2.C.<sup>4</sup>

For more information, the Company Contract's contract specifications are attached as Exhibit B.



<sup>&</sup>lt;sup>3</sup> *Id.*, amended Rule 6.2.C.

<sup>&</sup>lt;sup>4</sup> *Id*.



#### Exhibit B

#### **Rule 12.15 USD/ETH Deci Options**

- A. Contract Description. A Participant may enter into a Company Contract as the buyer or the seller of a call or put option contract on ETH. For both call and put options, on the Initial Payment Date the buyer must pay the Premium in USD and the seller's Participant Account will be credited with the Premium in USD. On the Final Payment Date, the buyer may elect to exercise the contract, at which point the Company Contract will be settled as described in Rule 6.2. All Company Contracts referencing Underlying Digital Currency, are subject to the LedgerX Digital Currency Fork Policy found in Rule 11.14.
- **B. Ethereum.** Ethereum is a computer network and protocol that allows digital currency to be stored and transferred in a distributed manner without the need for a central intermediary. The Ethereum network is a form of blockchain, which allows consensus to be built and maintained on a distributed, decentralized basis by parties with no inherent reason to trust one another. Each individual Ethereum transaction is validated by the network of decentralized parties, or nodes, over a period of time and then added to a "block", which is then cryptographically linked to the immediately preceding block (over time, creating a chain, or a "blockchain").
- **C. Trading Hours.** The trading hours of the Exchange's Designated Contract Market that are applicable to the Company Contract described in this Rule 12.15 will be 24 hours a day, seven days a week or as otherwise determined by the Exchange from time to time as disclosed on the Website and through Participant Notice.
- **D.** Currency. The currency applicable to USDETH Deci Options will be United States dollars, which will be expressed in dollars and cents per ETH.
- **E.** Underlying. The underlying applicable to USDETH Deci Options will be Ethereum (sometimes referred to as "ETH").
- **F.** Contract Size. Each USDETH Deci Option will be for 1/10 Underlying (i.e., one-tenth ETH).
- **G. Listing Cycle.** LedgerX shall post in a location on its website available to Participants a list of Company Contracts that are available for trading. At a minimum, that list shall include Company Contracts expiring on each of the four nearest Fridays, plus Company Contracts that expire on the last Friday of each of the following three calendar quarters.
- **H. Strike Prices and Intervals.** For each expiration date on which Company Contracts are listed, LedgerX shall list strike prices denominated in U.S. dollars as follows:

For the nearest four weeks, LedgerX shall list Company Contracts with at least five strike



prices at each expiry. Those strike prices shall be separated by equal intervals of at least \$10, or such other greater amount determined by LedgerX that is at least 20% above and below the spot market trading range over the prior 4-week period.

For Company Contracts with later expiries, LedgerX shall list at least three strike prices at each expiry in intervals determined at the discretion of LedgerX based on its assessment of the movements of the ETH spot market.

- **I.** Exercise Style. European (Exercise available only on the day of expiration per the terms of this contract specification).
- **J.** Exercise Instructions and Procedures. For the buyer of a USDETH Deci Option contract to exercise that contract, the buyer must submit exercise instructions to the Exchange's Designated Contract Market prior to the Final Payment Day/Time, and have sufficient collateral available for trading in buyer's account at that time to satisfy buyer's Settlement obligation. See Rules 7.1 and 7.2. USDETH Deci Option contracts will not be exercised automatically. See Rule 6.2.E.
- **K.** Expiration. If a buyer of a USDETH Deci Option does not exercise that option timely, or lacks sufficient collateral available for trading to satisfy buyer's Settlement obligation, then the option shall expire valueless.
- L. Position Limits. As of any date of determination, no person will own or control positions in excess of 1,000,000 USDETH Deci Options.
- M. Collateral. All Company Contracts will be fully collateralized. Before the Exchange's Designated Contract Market will accept a buy order for an USDETH Deci Option from a Participant, such Participant must have sufficient USD available for trading in its account to satisfy its obligation to pay the Premium on such Company Contract(s). Additional collateral is required from buyer to exercise the option, as described above. Before the Exchange's Designated Contract Market will accept a sell order for one or more USDETH Deci Options from a Participant, such Participant must have the following: (i) for call options, the seller must have sufficient ETH available for trading in its account to satisfy its delivery obligations on such Company Contract at Settlement; or (ii) for put options, the seller must have sufficient USD available for trading it its account to satisfy its payment obligations at Settlement.

#### N. Conventions.

- a. *Trade Date.* With respect to any USDETH Deci Option, the date on which the Exchange, in its sole discretion accepts a buy or sell order, as the case may be.
- b. *Effective Date*. With respect to any USDETH Deci Option, the Trade Date applicable thereto.



- c. *Strike Price*. As of any Trade Date, the agreed price in U.S. dollars to be paid at expiration for ETH.
- d. Minimum Price Fluctuation. With respect to any USDETH Deci Option, \$0.01.
- e. *Initial Payment Date*. With respect to any USDETH Deci Option, the Trade Date applicable thereto. The buyer of a USDETH Deci Option will pay the agreed amount of such Company Contract on the Trade Date thereof.
- f. *Premium*. With respect to any USDETH Deci Option, the Buyer thereof will pay the premium thereon on the Initial Payment Date.
- g. Last Trading Day/Time. Up to but not including 5:00 pm New York time (adjusted for daylight savings) on the Friday of the week and month of expiry for that contract, or as otherwise determined by the Exchange in its sole discretion.
- h. *Final Payment Day/Time*. 5:00 pm New York time (adjusted for daylight savings) on the Friday of the week and month of expiry for that contract.
- i. Settlement. Physical delivery on the Final Payment Day/Time.
- **O. Block Trading.** Each Block Trade of as USDETH Deci Options must be effectuated in accordance with Rule 5.7. The minimum block size for the USDETH Deci Options is equal to 10 contracts. All parties to a USDETH Deci Option Block Trade must be Eligible Contract Participants.



#### Exhibit C

LedgerX has determined that the Company Contract certified herein relates to the following DCM Core Principles:

### **Core Principle 2 – Compliance with Rules**

Trading in the Company Contract will be subject to the LedgerX Rulebook (the "Rules"), which prohibits abusive trading practices, including, but not limited to, the following: fraudulent trading (Rule 8.3.C); spoofing or any other conduct that constitutes a disruptive trading practice or is otherwise prohibited under CEA Section 4c(a)(5) or applicable CFTC Regulations (Rules 8.3.J, 8.3.N and 8.9); any manipulation proscribed under CEA Section 9(a)(2) or CFTC Regulations 180.1(a) or 180.2 (Rules 8.3.K and 8.9); making fictitious bids or offers (Rules 8.3.M and 8.9); or any other activity that tends to impair the welfare, reputation, integrity or good name of LedgerX (Rule 8.5).

As with all contracts listed for trading on LedgerX's designated contract market ("DCM"), trading activity in the Company Contract will be subject to monitoring and surveillance by LedgerX's Compliance Department. LedgerX has the authority to exercise its investigatory and enforcement power where potential Rule violations are identified. *See* Chapter 9 of the Rules.

## Core Principle 3 – Contracts Not Readily Susceptible to Manipulation

The Company Contract is not readily susceptible to manipulation because it is fully-collateralized and results in physical delivery if the option is exercised. LedgerX's fully-collateralized model limits the ability of Participants to manipulate the market through corners and squeezes. Under a partially-collateralized model, a Participant might be unable to source a sufficient quantity of the underlying to satisfy its delivery obligations because the market had been cornered. LedgerX's approach substantially reduces the likelihood of manipulation of the Company Contract because positions requiring performance are fully collateralized at the time of execution. For example, a Participant selling a USDETH Deci call option would not need to cover the position by purchasing more ETH because the Participant will have already posted the ETH underlying the contract with LedgerX pursuant to the fully-collateralized model. As a result, the call option seller will not experience a squeeze, and an attempt to squeeze the LedgerX market likely would be unsuccessful.

#### **Core Principle 4 – Prevention of Market Disruption**

Rule 8.9 prohibits traders from attempting to manipulate, or manipulating the market, in any contract listed on LedgerX's DCM, including any manipulation or attempted manipulation of the contract's underlying. This prohibition would include manipulation and attempted manipulation of the Company Contract and the underlying for the Company Contract. This Rule is enforced by LedgerX in accordance with Chapter 9 of the Rules.



## **Core Principle 5 – Position Limits or Accountability**

Rules 8.15 and 8.16 allow LedgerX to adopt position limits or position accountability levels for contracts listed on LedgerX's DCM. LedgerX has elected to set position limits as described above in Exhibit B in order to (i) add a further layer of protection for market participants by mitigating the risk of market manipulation and (ii) prevent excess speculation in the Underlying.

## **Core Principle 6 – Emergency Authority**

Pursuant to Rule 2.12, LedgerX may take necessary or appropriate actions in response to an emergency affecting trading or open positions in the Company Contract, including the following: (i) suspend or curtail trading in, or limit trading to liquidation, for the Company Contract; (ii) extend or shorten the last trading date for the Company Contract; (iii) provide alternative settlement mechanisms for the Company Contract (including by altering the settlement terms or conditions or fixing the settlement price) or suspend the transfer of the underlying; (iv) order the transfer or liquidation of open positions in the Company Contract under certain circumstances; (v) extend, shorten or change the trading hours or the expiration date of the Company Contract; (vi) require participants to meet special margin requirements; (vii) order the transfer of positions in the Company Contract and the associated margin or alter the Company Contract's settlement terms or conditions; or (viii) impose or modify position limits, price limits, and intraday market restrictions.

LedgerX has also added new Rule 11.14<sup>5</sup> (Digital Currency Fork Policy) to add an additional layer of protection, in anticipation of digital currency specific circumstances that may require LedgerX to exercise emergency authority.

#### **Core Principle 7 – Availability of General Information**

In accordance with Rule 2.17, LedgerX will publish daily information on the Company Contract regarding settlement prices, volume, open interest, and opening and closing ranges.

## **Core Principle 11 – Financial Integrity of Transactions**

Rule 6.1.A describes the process by which LedgerX verifies sufficient funds and/or collateral prior to accepting an order in any contract, including an order in the Company Contract. Specifically, upon submission of an order, LedgerX will conduct a review of the relevant participant's collateral account to ensure that the participant can fully collateralize the order prior to entering into the Company Contract. If the relevant participant's collateral account does not have the necessary funds and/or collateral for the order, LedgerX will not accept the order. Once orders in the Company Contract have been successfully matched, LedgerX's derivatives clearing organization will immediately clear the Company Contract in accordance with Rule 6.1.B.

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<sup>&</sup>lt;sup>5</sup> Id., new Rule 11.14.



# Exhibit D DELIVERABLE SUPPLY ANALYSIS

Pursuant to Regulation 38.252, LedgerX monitors the supply of ETH underlying the USDETH Deci Option contract and its adequacy to satisfy the delivery requirements so that LedgerX may make good faith efforts to resolve conditions that threaten the adequacy of supplies or the delivery process.

The commodity underlying the USDETH Deci Option contract (namely ETH) is a decentralized digital currency. The supply of ETH is publicly available on the ETH blockchain, and currently stands in excess of 114 million ETH. The total number of ETH, however, does not equal the total deliverable supply, since to accidental loss and willful destruction may effectively remove some ETH from circulation temporarily or permanently.

#### **Total Supply of ETH**

The Ethereum network also increases the total supply over time by issuing new ETH as blocks are added to the blockchain. This process of issuing new ETH incentivizes miners to process and validate those blocks. Currently, the network provides 2 ETH per new block in mining rewards. The network also rewards miners whose found blocks do not make it into the blockchain ("uncle blocks") with up to 1.75 ETH per uncle block.<sup>6</sup> This is necessary because Ethereum has low block confirmation times, so it is more likely that multiple blocks will be found around the same time. If Ethereum did not have an uncle block reward, it would be less attractive for miners to secure the network, as they would "win" the block rewards more rarely. Over the past year, the total supply of ETH has increased as follows:<sup>7</sup>

2020						
	Jan	Feb	Mar	Apr	May	Jun
Total ETH	109,511,661	109,907,159	110,330,033	110,752,856	111,161,261	111,556,089

2020						
	July	Aug	Sept	Oct	Nov	Dec
<b>Total ETH</b>	111,9787,163	112,400,518	112,820,993	113,225,824	113,645,918	114,065,028

2021						
	Jan					
Total ETH	114,484,369					

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<sup>&</sup>lt;sup>6</sup> ETH monetary policy may undergo changes as a result of off-chain governance. These monetary policy changes are generally expected to relate to the rate of issuance of new ETH, or the nature of payment of transaction fees.

<sup>&</sup>lt;sup>7</sup> Source: https://etherscan.io/chart/ethersupplygrowth.



## **Blockchain Transfers of ETH**

In addition to the expanding supply of ETH, substantial numbers of ETH are regularly transferred among wallets on the blockchain. The following chart reflects the total number of ETH transfers recorded on the blockchain: <sup>8</sup>

Month	2018	2019	2020	2021
January	33,504,270	16,569,597	17,703,536	37,490,761
February	22,231,978	13,413,899	19,212,778	
March	20,261,862	18,029,582	22,748,700	
April	20,876,642	19,830,158	23,211,389	
May	25,105,717	24,332,475	26,6485,87	
June	22,471,788	25,679,653	28,802,843	
July	19,937,033	22,892,039	33,896,953	
August	19,842,059	22,003,889	36,679,836	
September	16,056,742	20,465,806	32,848,877	
October	17,056,926	20,954,629	33,297,049	
November	16,713,911	20,388,573	33,785,905	
December	17,107,601	18,271,815	35,930,517	
Yearly Total:	251,166,529	242,832,115	318,118,383	

### Major Spot Exchange Trades of ETH for U.S. Dollars

The volume of ETH transacted on spot exchanges is also extensive. The following chart reflects the total number of ETH traded for U.S. dollars each month on major spot exchanges:<sup>9</sup>

Month	2018	2019	2020	2021
January	19,727,609	19,150,973	7,829,149	45,329,356
February	14,813,754	17,414,591	14,305,798	
March	12,907,881	10,545,202	27,446,677	
April	13,840,051	17,381,625	16,497,060	
May	13,813,195	23,443,609	12,889,006	
June	10,376,771	15,474,969	9,485,508	
July	7,215,427	12,981,963	11,066,344	
August	11,484,458	7,371,810	15,387,261	
September	23,281,832	8,968,387	15,703,915	
October	10,062,781	7,768,303	8,764,006	
November	23,792,955	5,781,297	18,217,716	
December	32,049,358	4,951,217	17,903,988	
Yearly Total:	193,366,072	151,233,946	175,496,428	

<sup>&</sup>lt;sup>8</sup> Source: https://etherscan.io/chart/tx.

<sup>&</sup>lt;sup>9</sup> Source: <a href="https://coinmetrics.io">https://coinmetrics.io</a> (measuring ETH-USD volumes across BinanceUS, Bitfinex, Bitstamp, Bittrex, Cex.io, Coinbase, FTX, Gatecoin, Gemini, Itbit, Kraken, and Liquid).



## **Sufficiency of Deliverable Supply**

Based on the above information, LedgerX recommends an initial position limit of 1,000,000 contracts, which is the equivalent of 100,000 ETH (each LedgerX Company Contract is the equivalent of 1/10<sup>th</sup> ETH). This amounts to 0.087% of the total outstanding ETH as of January 2021. It further amounts to 0.266% of the total number of ETH transferred on the blockchain in the same month. Moreover, it equals 0.221% of the total ETH transacted for U.S. dollars on major spot exchanges in January of 2021, as detailed above.

LedgerX further ensures that there is sufficient deliverable supply of ETH to satisfy LedgerX's Company Contracts by requiring full collateralization of any position requiring performance at the time of execution. Thus, when the seller of a USDETH Deci call option enters into the position, the ETH must already be in the possession of the seller to ensure delivery at expiry if the contract is exercised.

Based on the foregoing, LedgerX concludes that there is sufficient deliverable supply of ETH for the performance of LedgerX Company Contracts, as explained above.

